## Patty Shen

## Biomedical Engineering

Patty Shen, Ph.D. in Computational and Neural Systems from the California Institute of Technology, entered a prestigious research university as an assistant professor. She specialized in distributed computing and computation in neural and biological systems within the biomedical engineering group. Her start-up package was higher than average, as her field was relatively new and required the purchase of some fairly expensive parallel computing and visualization equipment. Because Shen considered a competing offer, the department engaged in a bidding war to induce her to accept the appointment. Three other assistant professors in closely related areas were hired in the same year with packages not as generous as Shen's . At the end of Shen's first year, her chair complimented her on establishing "a good rapport" with her graduate students and for her success in publishing a paper based on her group's work, with two more in press.

Publishing additional papers in *Nature*, *Neuron*, *The Journal of Computational Biology*, *Current Biology*, and elsewhere, Shen continued her steady publication record through her next two years. She also took on responsibility for teaching one of the core courses for the undergraduate program and for introducing a key new graduate course in her area, earning above average and excellent evaluation scores from students. Exit interviews of seniors conducted by the chair indicated that all students appreciated Shen's thorough approach and that many, especially women, found her to be a valuable role model.

In her third year, Shen won an NSF Faculty Early Career Award. In addition, during her probationary period, Shen and two junior colleagues, along with two senior professors, developed a new center in biocognitive processing that was nurtured by the university before attracting a good deal of National Science Foundation funding.

Anticipating the birth of a child that summer, Shen requested, in the spring of her third year, the following accommodations: to receive an unpaid leave of absence during the subsequent fall semester and to be released from teaching duties the spring thereafter under provisions of the university's Active Services Modified Duties Procedure. In lieu of teaching responsibilities in the spring, she proposed to design a new elective for upper-division students in her field and to continue working with the center that she helped develop. Her requests were granted, thereby stopping her tenure clock for one year.

During the year of her leave of absence and modified duties, Shen laid out plans for the new course and published two papers that had been in process. Unanticipated post-childbirth medical complications necessitated a long period of medical therapy, and she was unable to devote much time to her research during the time away from teaching as she was also coping with the demands of an infant. A private person, Shen did not share information about her medical condition with her colleagues, except with her chair and dean, whose confidence was requested, because Shen needed their support for a particular schedule and for a limited set of service responsibilities.

During the following year, Shen's official fourth year of service, she returned to teaching and earned speaking invitations at European and Asian seminars. For this year, her publication record revealed a demonstrable gap: during that year she had no publications nor had she submitted anything for publication. Her own medical problems diminished her ability to mount focused technical efforts in the year following her leave.

Shen's medical problems abated, and during her fifth official year she was able to accelerate her research productivity. In this year, she published one paper, and she received excellent evaluations from her undergraduate and graduate students, although she was able to contribute only minimal service efforts to her department given her family schedule. Had the tenure clock not been stopped, this would have been the year for Shen to come up for tenure. Shen considered a return to the original schedule, but noting the earlier gap in her publication record, her chair advised her instead to wait until the following year (her official sixth) to come up for promotion and tenure evaluation. Somewhat reluctantly, Shen agreed.

By the time she came up for tenure (in her official sixth year and seven years after entering the university), her rate of publication was improving, and her total record — in terms of the quantity and the quality of scholarly papers, her teaching evaluations and contributions, and her service — was not too dissimilar from those of the other assistant professors coming up for evaluation at the same time. Letters from reviewers indicated that Shen has a strong

scholarly reputation and that her work has key significance for her field. One reviewer mentioned Shen's medical difficulties following childbirth, an admission surprising the committee members who had not been previously informed. Some committee members had noted in earlier, initial committee discussions that Shen seemed to "appear and disappear" on the scene through the years, recalling lengthy periods in which she was not in attendance at faculty meetings and retreats. Her involvement in faculty committees was minimal as well.

Her original cohort had already earned promotion and tenure, but Shen's stopping of the tenure clock for one year had delayed her case. As a member of her school promotion and tenure committee, how would you respond to concerns raised by another member that Shen has taken too much time to get to the same place as others under evaluation that year, that she may have accelerated her productivity over the past 12 - 14 months simply to be more competitive in the tenure process, and that she might not be able to sustain such productivity in the future?

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